

ABSTRACT

In the present invention, a micro-pattern embedded optical film for cell-based assays is described. The optical film contains micro-patterns in the form of geometric shapes, such as lines and curves, and numbers and letters. Furthermore, the optical film
5 contains a coordinate system that allows identification of each location on the optical film for cell-based assays, including cell growth, identification, and measurements under an optical microscope. Furthermore, an apparatus with the micro-pattern embedded optical film and a supporting part is described. Methods for making the optical film and apparatus are disclosed. A method for performing cell-based assays using the optical
10 film or apparatus is shown.